

REMARKS

The Official Action mailed May 13, 2009, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on November 17, 2003, and January 29, 2009.

A further Information Disclosure Statement is submitted herewith and consideration of this Information Disclosure Statement is respectfully requested.

Claims 1-36 are pending in the present application of which claims 1, 10, 19 and 28 are independent. Claims 19 and 28 have been amended to correct minor informalities. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action objects to claims 19 and 28 and states that “‘different layers each other’ will be changed to ‘different layers from each other’ for the purposes of examination” (page 2, Paper No. 20090504). In response, claims 19 and 28 have been amended to add from as noted in the objection. The amendments are merely clarifying in nature, and should not in any way affect the scope of protection afforded the claims for infringement purposes, particularly under the Doctrine of Equivalents. As such, it is not believed that these amendments raise any new issues that would require further consideration or search and thus are believed to be appropriate for entry after final. Accordingly, reconsideration and withdrawal of the objections are in order and respectfully requested.

The Official Action rejects claims 1-36 as obvious based on U.S. Patent No. 5,268,679 to Shannon. The Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2144.04, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either

in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. As noted in the *Amendment* filed January 29, 2009 (received by OIPE January 30, 2009), independent claims 1, 10, 19 and 28 were amended to recite a lamination structure, the relationship between an optical shutter, an optical sensor, an electronic circuit including thin film transistors, and additional thin film transistors. Also, the claims were amended to recite features of an electric source; buffer; a connection relationship between the optical sensor, the additional thin film transistor, the electric source and the buffer; and the relationship between the buffer and an electronic signal. Specifically, the buffer is provided between the optical sensor and the electronic circuit. These features are supported in the present specification, for example, by at least Embodiment 1 (page 10, line 1, through page 12, line 7), and Figures 4 and 6. For the reasons provided below, Shannon does not teach or suggest the above-referenced features of the present invention.

The Official Action concedes that Shannon does not teach "the optical sensor connected to a buffer, wherein the electronic signal is inputted to the circuit through the

buffer” (page 3, Paper No. 20090504). Without any specific references to Shannon in support and without establishing the level of ordinary skill in the art at the time of the present invention, the Official Action asserts that “buffers are well known in the art” (*Id.*). The Applicant respectfully disagrees and traverses the assertions in the Official Action.

As provided in detail below, the Official Action has not provided evidence that the prior art explicitly teaches all the features of the present claims. Although the Official Action has not articulated a theory of inherency, if such theory is relied upon, the Examiner is reminded that in relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art (MPEP § 2112). Also, the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness (MPEP § 2142). It is respectfully submitted that the Official Action has failed to meet these burdens of proof.

In the present invention, an optical sensor converts an optical signal into an electronic signal, and then the electronic signal is inputted into an electronic circuit including a plurality of layers each including a thin film transistor through a buffer. In order to operate the electronic circuit correctly, preferably and in accordance with the present invention, it is important to provide the buffer between the optical sensor and the electronic circuit. The prior art does not teach or suggest such features.

Shannon merely discloses the following (column 5, lines 28-42; emphasis added):

Each photosensitive diode 34 is arranged, in the example shown in FIG. 3, to detect light incident on the associated matrix cell 35 and, when the gate of the associated switching element 33 is addressed, to supply a voltage signal to the associated column line 13, via the switching element 33. Thus when the gates of the switching elements 32 and 33 associated with a particular matrix cell 35 are addressed by the Y control/addressing circuit 16 via the associated row line 14, any voltage supplied by the X control/addressing circuit 15 and/or via the light sensed by the photosensitive diode 34 is supplied to the liquid crystal element 31 of that

matrix cell 35, via the associated switching element 32, to modify the light transmission properties of the liquid crystal element 31.

That is, voltage via the light sensed by the photosensitive diode 34 is only supplied to the liquid crystal element 31 in the same matrix cell 35 as the photosensitive diode 34" (see Figure 3, reproduced below).

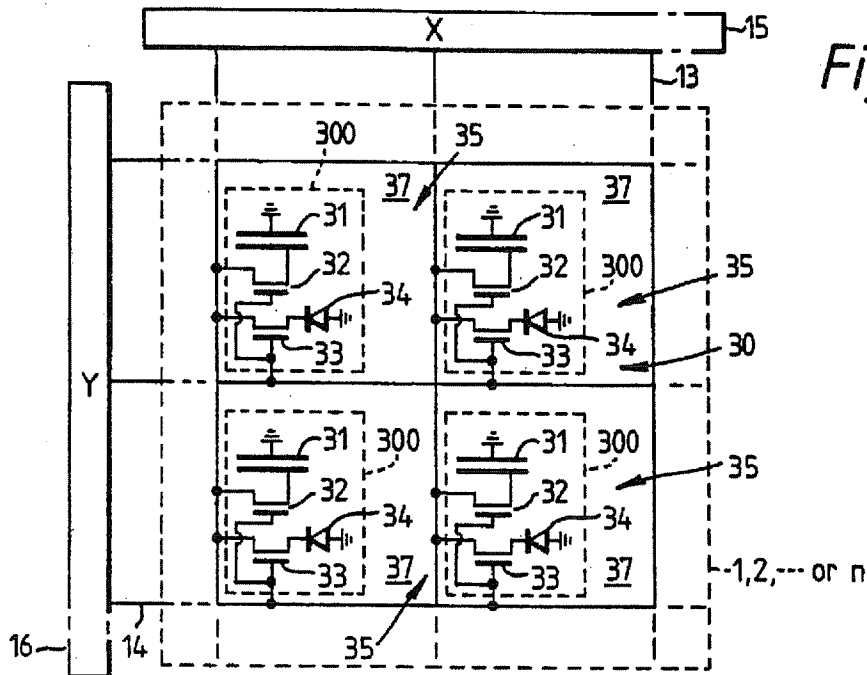


Fig. 3.

As such, Shannon does not appear to require a buffer. Therefore, the Applicant respectfully submits that Shannon does not teach or suggest a lamination structure, the relationship between an optical shutter, an optical sensor, an electronic circuit including thin film transistors, and additional thin film transistors; an electric source; buffer; a connection relationship between the optical sensor, the additional thin film transistor, the electric source and the buffer; and the relationship between the buffer and an electronic signal.

Since Shannon does not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained.

Furthermore, there is no proper or sufficient reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Shannon to achieve the claimed invention. MPEP § 2142 states that the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. It is respectfully submitted that the Official Action has failed to carry this burden. While the Official Action relies on various teachings of the cited prior art to disclose aspects of the claimed invention and asserts that these aspects could be modified in the manner asserted in the Official Action, it is submitted that the Official Action does not adequately set forth why one of skill in the art would combine the references to achieve the features of the present invention.

The test for obviousness is not whether the references “could have been” combined or modified as asserted in the Official Action, but rather whether the references should have been. As noted in MPEP § 2143.01, “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art” (emphasis in original). KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 82 USPQ2d 1385, 1396 (2007). Thus, it is respectfully submitted that the standard set forth in the Official Action is improper to support a finding of *prima facie* obviousness.

As noted above, the Official Action concedes that Shannon does not teach “the optical sensor connected to a buffer, wherein the electronic signal is inputted to the circuit through the buffer” (page 3, Paper No. 20090504). Without any specific references to Shannon in support and without establishing the level of ordinary skill in the art at the time of the present invention, the Official Action asserts that “buffers are well known in the art and as such, one having ordinary skill would have found it obvious to connect the output from the optical sensor to the electronic circuit through a buffer for the purpose of impedance matching and to help the circuit perform more effectively” (*Id.*; emphasis added). The Applicant respectfully disagrees and traverses the assertions in the Official Action.

The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. § 103 should be made explicit (KSR International Co. v. Teleflex Inc., 550 U.S. ___, 82 USPQ2d 1385). The Court quoting In re Kahn (441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)) stated that “[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” KSR, 550 U.S. at ___, 82 USPQ2d at 1396. In the present application, the Official Action appears to contain mere conclusory statements, for example, as noted above, at page 3 (Id.), and the Official Action has not set forth articulated reasoning with some rational underpinning to support the assertion of *prima facie* obviousness. For example, it is not clear what the Examiner’s basis is for the assertion that “one having ordinary skill would have found it obvious to connect the output from the optical sensor to the electronic circuit through a buffer for the purpose of impedance matching and to help the circuit perform more effectively.”

Therefore, the Applicant respectfully submits that the Official Action has not provided a proper or sufficient reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to provide a buffer in Shannon’s device or to combine reference teachings to achieve the claimed invention.

In the present application, it is respectfully submitted that the prior art of record, either alone or in combination, does not expressly or impliedly suggest the claimed invention and the Official Action has not presented a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

For the reasons stated above, the Official Action has not formed a proper *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789